Record Nr. UNINA9910812919203321 Current application of polymers and nano materials : special topic **Titolo** volume with invited peer reviewed papers only / / edited by: Amir Al-Ahmed Stafa-Zurich, Switzerland;; Enfield, New Hampshire:,: Trans Tech Pubbl/distr/stampa Publications, , [2010] ©2010 **ISBN** 3-03813-329-9 1-61344-669-1 Descrizione fisica 1 online resource (259 p.) Collana Materials science forum, , 0255-5476 ; ; volume 657 Altri autori (Persone) Al-AhmedAmir Disciplina 620.11 Soggetti **Polymers** Nanostructured materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and indexes. Current Application of Polymers and Nano Materials: Foreword: Preface: Nota di contenuto Table of Contents: Metal-Containing Polyurethanes: An Overview: Synthesis, Characterization & Impedance Studies of some New Nano Filtration Membranes; X-Ray Photoelectron Spectroscopy Characterization of Polyaniline-Cellulose Ester Composite Membranes; Optical and Electrochemical Properties of a New Donor-Acceptor Type Conjugated Polymer Derived from Thiophene, Carbazole and 1,3,4-Oxadiazole Units Nonlinear Optical Studies on a New Poly{2-(biphenyl-4-yl)-5-[3,4didecyloxy-5-(1,3,4-oxadiazol-2-yl)thiophen-2-yl]-1,3,4-oxadiazole} Synthesis and Characterization of Titanium Dioxide Nanotubes for Photocatalytic Degradation of Aqueous Nitrobenzene in the Presence of Sunlight; Recent Developments of Nanomaterial Doped Paints for the Minimization of Biofouling in Submerged Structures; A Novel Single-Site Catalyst for Olefin Polymerization; Advanced Membrane Materials for Fuel Cell Applications Electrical and Proton Conducting Polymer Based Composite Electrodes Incorporating Fuel Cell Catalysts: Screen Printed Systems Analysed

Using Hall MeasurementsComponents for PEM Fuel Cells: An Overview;

Sommario/riassunto

Amorphous and nc-Si:H Intrinsic Thin Films for Solar Cells Applications; A Review of Dye Incorporated Conducting Polymers Application as Sensors and in Solar Cells; Electrochemical and Spectroscopic Dynamics of Nanostructured Polynuclear Sulphonic Acid-Doped Poly(2, 5-dimethoxyaniline); Keywords Index; Authors Index

This Special Topic Volume constitutes the contributions of thirty-nine experts from the international scientific community who are involved in this field of research. It covers thoroughly some of the latest applications of polymers and nano-materials to solar-cells, fuel cells, catalysis, coatings, ion-exchange and sensors. It presents an up-to-date and in-depth coverage of the chemistry, physics, materials science and engineering applications of polymers and nano-materials. This remarkable cooperation of distinguished experts has resulted in a comprehensive review of the subject.